

FIGURE 1 (Prior Art)

FIG. 2 is a block diagram of a network system 230, according to one embodiment of the present invention. The network system 230 includes a front module 210 and a rear transition module 220. The front module 210 includes a network controller 103 and a network interface 215. The rear transition module 220 includes a transceiver 105, transmit magnetics 107, and receive magnetics 109. The network controller 103 is connected to the network interface 215. The transceiver 105 is connected to the network interface 215 and the transmit magnetics 107 and receive magnetics 109. The transmit magnetics 107 are connected to a transmit network T_NET+ and T_NET-. The receive magnetics 109 are connected to a receive network R_NET+ and R_NET-.

230

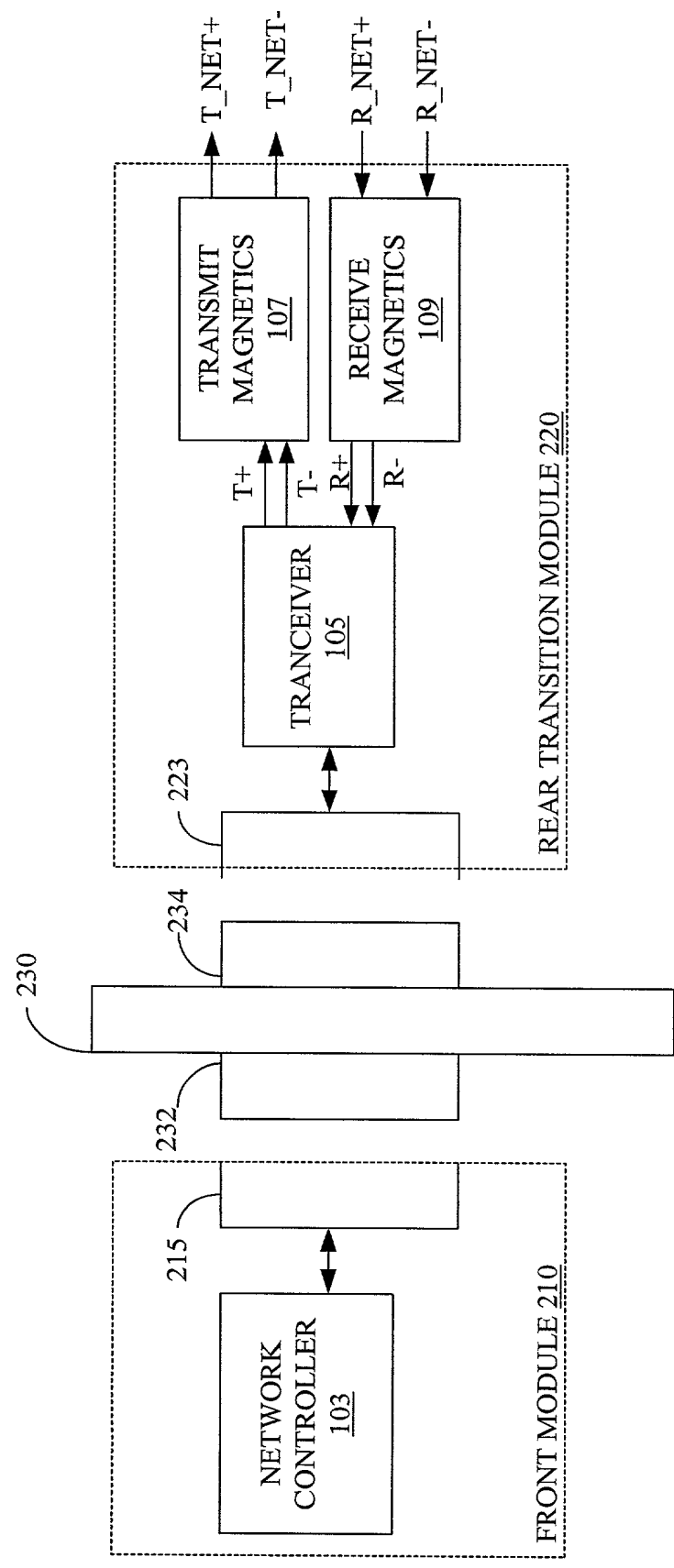


FIGURE 2 (Prior Art)

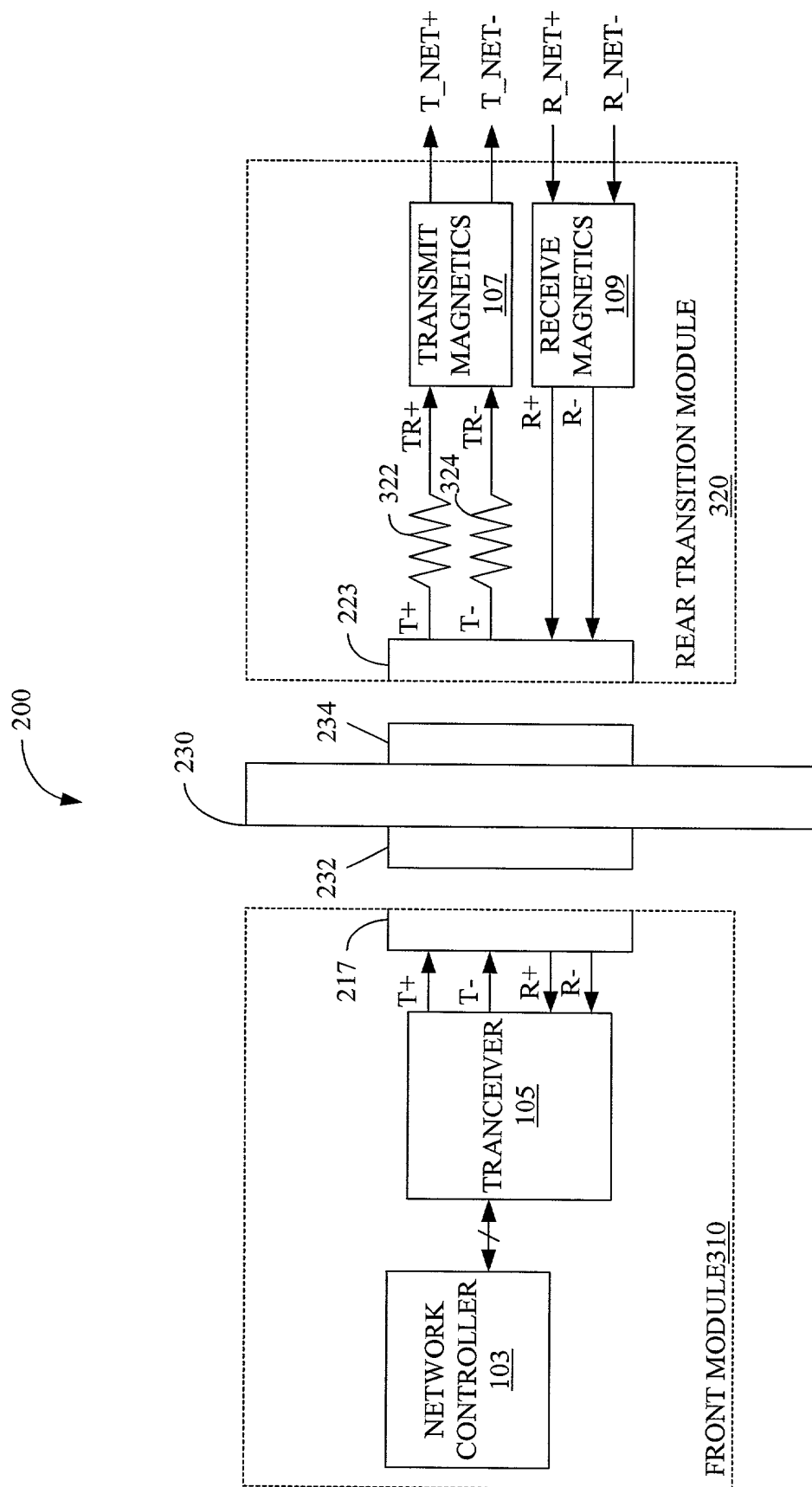


FIGURE 3

FIG. 4 is a block diagram of a network interface module 230. The module 230 includes a front module 410 and a rear transition module 420. The front module 410 includes three network controllers 103A, 103B, and 103C. Each network controller is connected to a corresponding transceiver 105A, 105B, and 105C. The transceivers are connected to a common bus 217. The rear transition module 420 includes three transmit magnetic blocks 107A, 107B, and 107C, and three receive magnetic blocks 109A, 109B, and 109C. The transmit magnetic blocks are connected to the bus 217 via transmit lines 322A, 322B, and 322C. The receive magnetic blocks are connected to the bus 217 via receive lines 324A, 324B, and 324C. The module 230 is connected to a network 232 and a network 234.

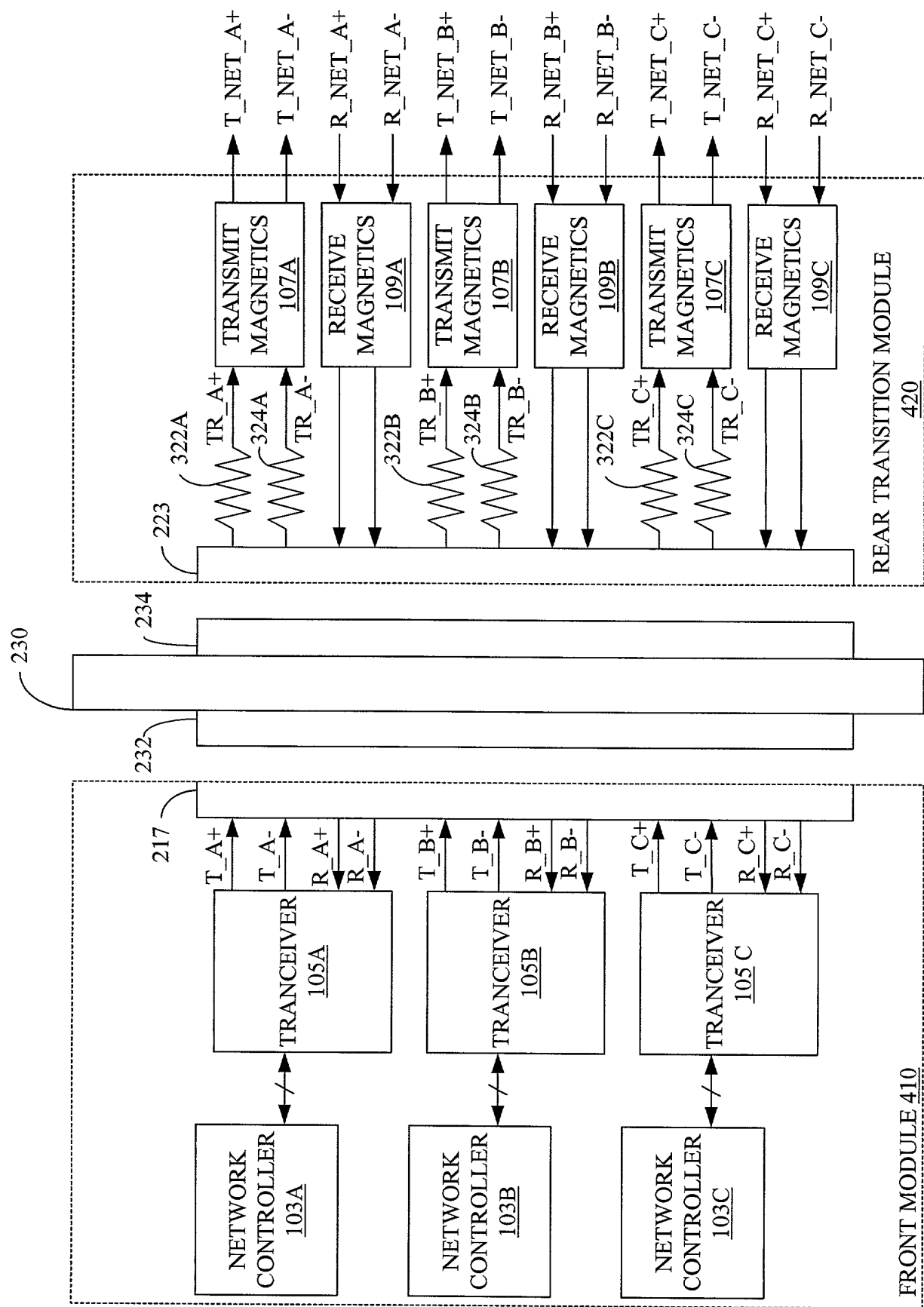


FIGURE 4

217

218

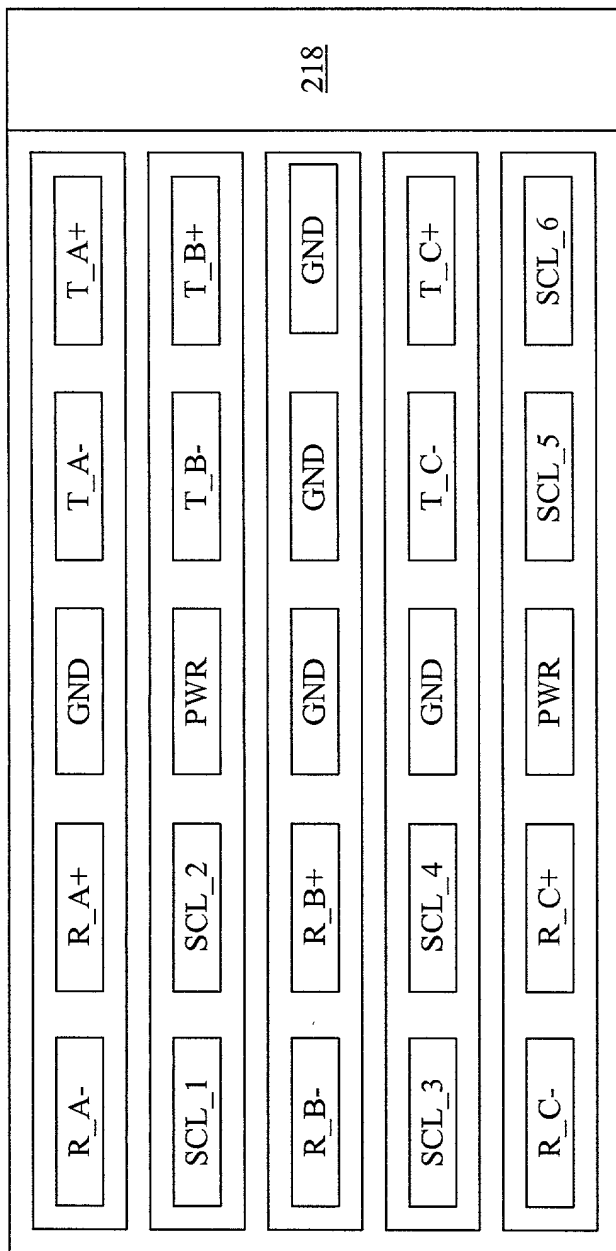


FIGURE 5